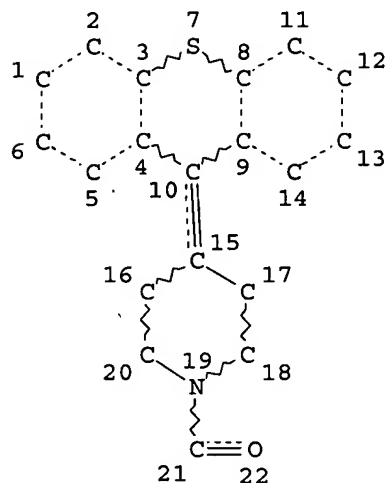


=> d l3

L3 HAS NO ANSWERS

L3 STR



NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 16 10

NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

=> s l3 ful

FULL SEARCH INITIATED 18:06:13 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 83 TO ITERATE

100.0% PROCESSED 83 ITERATIONS

SEARCH TIME: 00.00.01

41 ANSWERS

L5 41 SEA SSS FUL L3

=> fil caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

170.60

170.81

FILE 'CAPLUS' ENTERED AT 18:06:17 ON 18 DEC 2006

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FILE LAST UPDATED: 17 Dec 2006 (20061217/ED)

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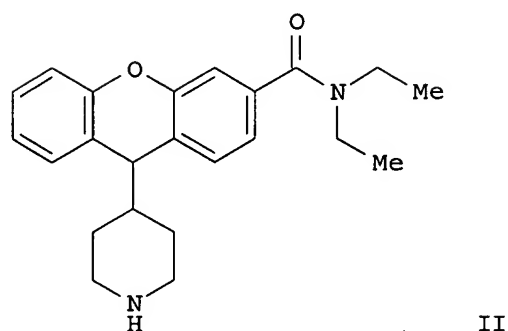
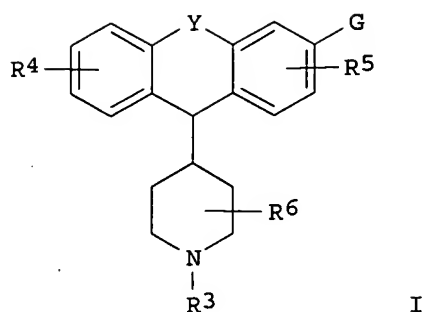
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L6 15 L5

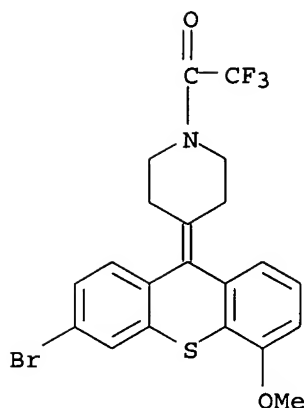
=> d bib abs hitstr 1-15

L6 ANSWER 1 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
AN 2006:605887 CAPLUS
DN 145:83215
TI Preparation of tricyclic delta-opioid modulators for treating pain and
other diseases
IN Carson, John R.; Dax, Scott L.; Decorte, Bart; Liu, Li; McDonnell, Mark;
McNally, James J.
PA USA
SO U.S. Pat. Appl. Publ., 61 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 2006135522 | A1 | 20060622 | US 2005-314300 | 20051221 |
| | WO 2006069275 | A1 | 20060629 | WO 2005-US46690 | 20051221 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRAI | US 2004-638314P | P | 20041222 | | |
| OS | MARPAT 145:83215 | | | | |
| GI | | | | | |



- AB The invention is directed to delta opioid receptor modulators of general formula I (wherein G = -C(Z)N(R1)R2, (un)substituted C6-10aryl, or (unsubstituted) heterocycle; R1 = H, C1-8alkanyl, C2-8alkenyl, and C2-8alkynyl; R2 = H, C1-8alkanyl, C2-8alkenyl, C2-8alkynyl, C6-10aryl, and C1-8cycloalkanyl, some of which are optionally substituted; R3 = H, C1-8alkanyl, halo1-3(C1-8)alkanyl, C3-8cycloalkanyl, etc.; R4 = 1-3 substituents selected from H, C1-6alkanyl, aryl(C2-6)alkynyl, amino, heterocyclyl, etc.; R5 = 1-2 substituents selected from H, C1-6alkanyl, C2-6alkenyl, CN, OH, etc.; R6 = 1-4 substituents selected from H, C1-6alkanyl, C2-6alkenyl, C1-6alkanyloxy, NH2, etc.; Y = O or S; and Z = O, S, NH, N(C1-6alkanyl), N(OH), N(OC1-6alkanyl), or N(phenyl)). Pharmaceutical and veterinary compns. and methods of treating mild to severe pain and various diseases using compds. of the invention are also described. Methods of preparing I are exemplified. For example, II was prepared from 4-bromo-2-phenoxybenzonitrile in 7 steps via the intermediate 9-oxo-9H-xanthene-3-carboxylic acid. In rat brain δ -opioid receptor binding assays, II had a K_i of 15 nM.
- IT 893416-57-4P, 1-[4-(3-Bromo-5-methoxythioxanthen-9-ylidene)piperidin-1-yl]-2,2,2-trifluoroethanone
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of tricyclic delta-opioid modulators for treating pain and other diseases)
- RN 893416-57-4 CAPLUS
- CN Piperidine, 4-(3-bromo-5-methoxy-9H-thioxanthen-9-ylidene)-1-(trifluoroacetyl)- (9CI) (CA INDEX NAME)



L6 ANSWER 2 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 2003:633456 CAPLUS

DN 139:154954

TI Medicinal compositions containing gabapentin or pregabalin and N-type calcium channel antagonist

IN Iwayama, Satoshi; Koganei, Hajime; Fujita, Shinichi; Takeda, Tomoko; Yamamoto, Hiroshi; Niwa, Seiichi

PA Ajinomoto Co., Inc., Japan

SO PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|------|----------------|------|----------|--|----------|--|
| PI | WO 2003066040 | A1 | 20030814 | WO 2003-JP1163 | 20030205 | |
| | W: | | | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | |
| | RW: | | | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | |
| | AU 2003207219 | A1 | 20030902 | AU 2003-207219 | 20030205 | |
| | EP 1481673 | A1 | 20041201 | EP 2003-703174 | 20030205 | |
| | R: | | | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | |
| | US 2005009814 | A1 | 20050113 | US 2004-911633 | 20040805 | |
| PRAI | JP 2002-28208 | A | 20020205 | | | |
| | JP 2002-111068 | A | 20020412 | | | |
| | JP 2002-317480 | A | 20021031 | | | |
| | WO 2003-JP1163 | W | 20030205 | | | |

OS MARPAT 139:154954

AB Disclosed are medicinal compns. useful as preventives/remedies for pain which comprise gabapentin, pregabalin or pharmaceutically acceptable salts thereof combined with N-type calcium channel antagonists or pharmaceutically acceptable salts thereof having specified structures. A compound N-[3-[4-(5H-dibenzo[a,d][7]annulene-5-ylidene)-1-piperidinyl]-3-oxopropyl]-2,2-dimethylpropanamide (I) was prepared. The analgesic effect of oral administration of gabapentin 100 mg/kg combined with the compound I 3 mg/kg in pain rat model was examined.

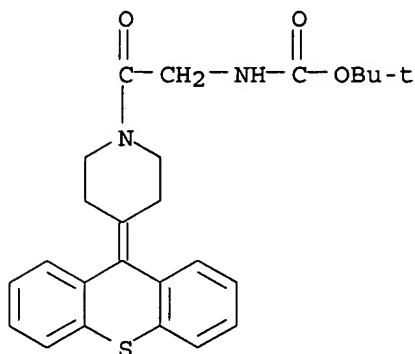
IT 500894-64-4P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic

preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(medicinal compns. containing gabapentin or pregabalin and N-type calcium channel antagonist)

RN 500894-64-4 CAPLUS

CN Carbamic acid, [2-oxo-2-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



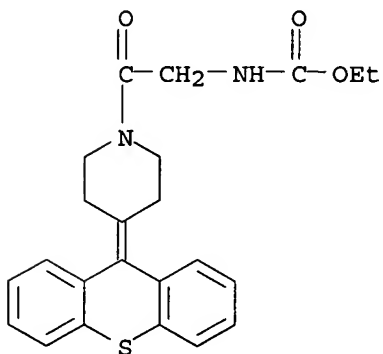
IT 500894-66-6P 500895-32-9P 500895-33-0P
500895-39-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(medicinal compns. containing gabapentin or pregabalin and N-type calcium channel antagonist)

RN 500894-66-6 CAPLUS

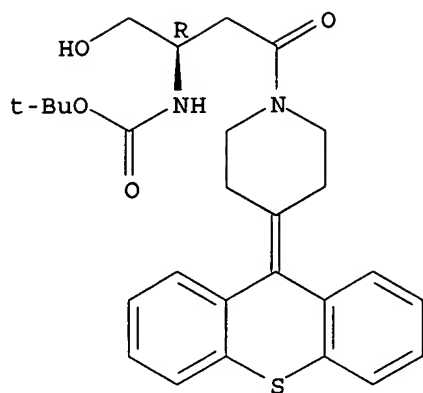
CN Carbamic acid, [2-oxo-2-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 500895-32-9 CAPLUS

CN Carbamic acid, [(1R)-1-(hydroxymethyl)-3-oxo-3-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

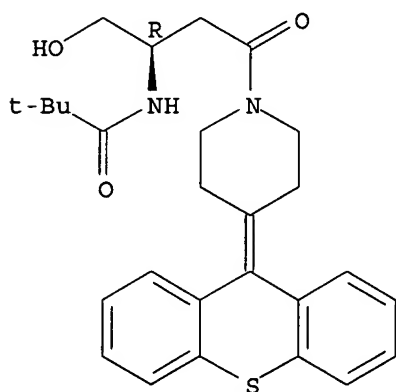
Absolute stereochemistry.



RN 500895-33-0 CAPLUS

CN Propanamide, N-[(1R)-1-(hydroxymethyl)-3-oxo-3-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]propyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

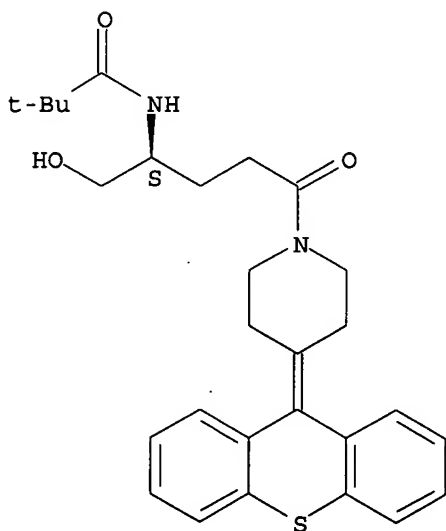
Absolute stereochemistry.



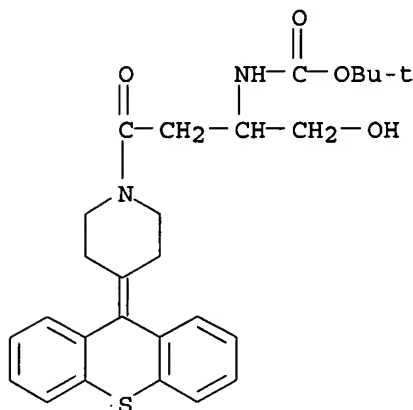
RN 500895-39-6 CAPLUS

CN Propanamide, N-[(1S)-1-(hydroxymethyl)-4-oxo-4-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]butyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

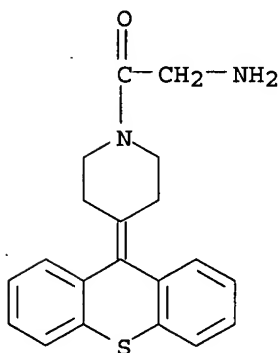
Absolute stereochemistry.



IT 572923-88-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (medicinal compns. containing gabapentin or pregabalin and N-type calcium
 channel antagonist)
 RN 572923-88-7 CAPLUS
 CN Carbamic acid, [1-(hydroxymethyl)-3-oxo-3-[4-(9H-thioxanthen-9-ylidene)-1-
 piperidinyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



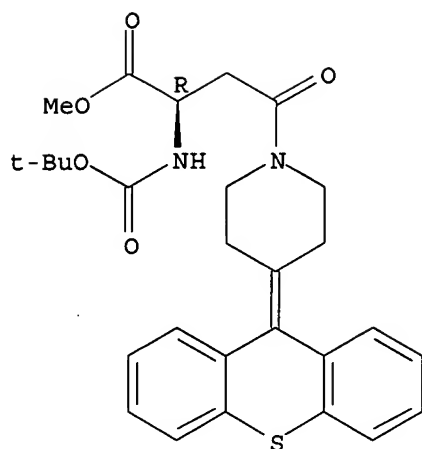
IT 500894-98-4P 500895-61-4P 500895-62-5P
 500895-63-6P 500895-64-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of N-type calcium channel antagonist for medicinal compns.
 containing gabapentin therewith)
 RN 500894-98-4 CAPLUS
 CN Piperidine, 1-(aminoacetyl)-4-(9H-thioxanthen-9-ylidene)-,
 monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 500895-61-4 CAPLUS
 CN 1-Piperidinebutanoic acid, α-[[[(1,1-dimethylethoxy)carbonyl]amino]-
 γ-oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (αR)- (9CI)
 (CA INDEX NAME)

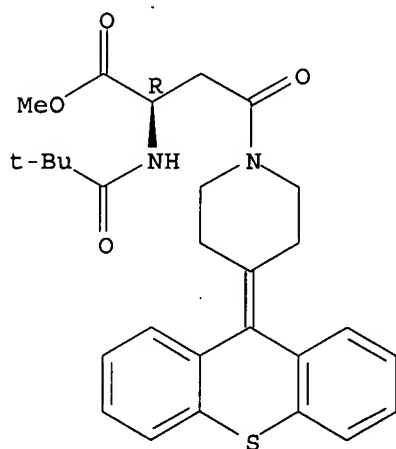
Absolute stereochemistry.



RN 500895-62-5 CAPLUS

CN 1-Piperidinebutanoic acid, α-[(2,2-dimethyl-1-oxopropyl)amino]-
γ-oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (αR)- (9CI)
(CA INDEX NAME)

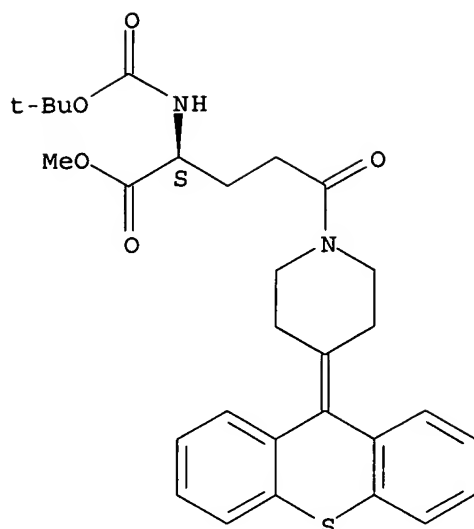
Absolute stereochemistry.



RN 500895-63-6 CAPLUS

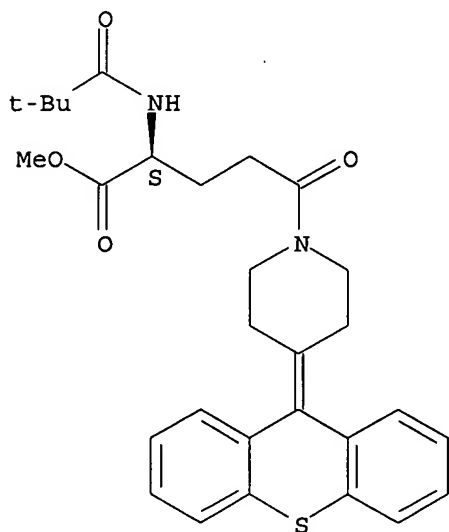
CN 1-Piperidinepentanoic acid, α-[[[(1,1-dimethylethoxy)carbonyl]amino]-
8-oxo-4-(9H-thioxanthen-9-ylidene)-], methyl ester, (αS)- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



RN 500895-64-7 CAPLUS
 CN 1-Piperidinepentanoic acid, α -[(2,2-dimethyl-1-oxopropyl)amino]-
 8-oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (α S)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



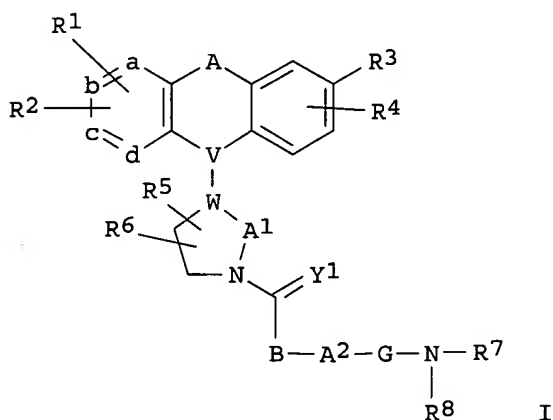
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 2003:173572 CAPLUS
 DN 138:221602
 TI Preparation of diarylalkene and diarylalkane derivatives as N-type calcium
 channel antagonists
 IN Yamamoto, Takashi; Niwa, Seiji; Otani, Kayo; Ohno, Seiji; Koganei, Hajime;
 Iwayama, Satoshi; Takahara, Akira; Ono, Yukitsugu; Takeda, Tomoko; Fujita,
 Shinichi; Moki, Keiko
 PA Ajinomoto Co., Inc., Japan; et al.
 SO PCT Int. Appl., 158 pp.
 CODEN: PIXXD2
 DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 2003018538 | A1 | 20030306 | WO 2002-JP8809 | 20020830 |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 2004167118 | A1 | 20040826 | US 2004-787175 | 20040227 |
| PRAI | JP 2001-263718 | A | 20010831 | | |
| | JP 2002-14387 | A | 20020123 | | |
| | JP 2002-111067 | A | 20020412 | | |
| | WO 2002-JP8809 | A1 | 20020830 | | |
| OS | MARPAT 138:221602 | | | | |
| GI | | | | | |



AB The title compds. I [A represents CH:CH, etc.; a, b, c, and d each represents CH, etc.; R1, R2, R3, R4, R5, and R6 each represents hydrogen, etc.; V-W represents C:C, etc.; A1 is (CH2)_n; n is 0 to 3; Y1 represents oxygen, etc.; B represents (CH2)_vCHR₂₁ (v is 0 to 3 and R₂₁ represents hydrogen, lower alkyl, etc.), etc.; G represents CO, a covalent bond, etc.; A2 is (CH2)_m; m is 0 to 6; and R7 and R8 each represents hydrogen, lower alkyl, COR_{18a}, COOR₂₀ (R_{18a} and R₂₀ each represents lower alkyl, etc.), etc.] are prepared I are selective N-type calcium channel antagonists. In an in vitro test, compds. of this invention at 10 μM gave 67% to 85% antagonism of N-type calcium channel.

IT 500894-64-4P 500894-66-6P 500895-32-9P

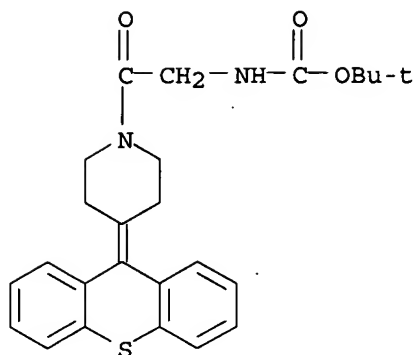
500895-33-0P 500895-39-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of diarylalkene and diarylalkane derivs. as N-type calcium channel inhibitors)

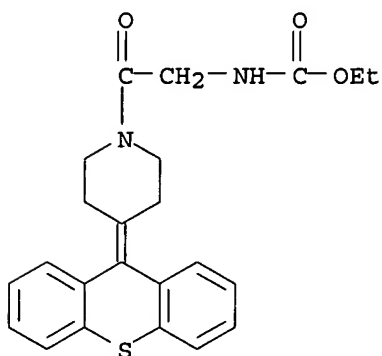
RN 500894-64-4 CAPLUS

CN Carbamic acid, [2-oxo-2-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 500894-66-6 CAPLUS

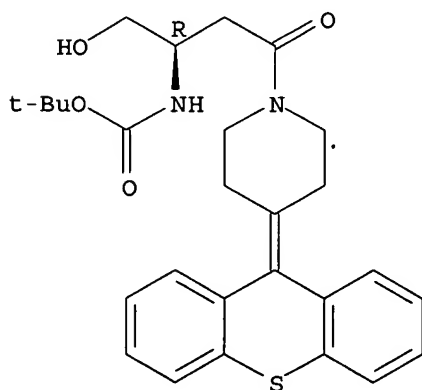
CN Carbamic acid, [2-oxo-2-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]ethyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 500895-32-9 CAPLUS

CN Carbamic acid, [(1R)-1-(hydroxymethyl)-3-oxo-3-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

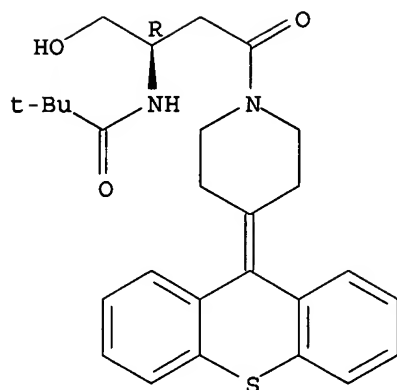
Absolute stereochemistry.



RN 500895-33-0 CAPLUS

CN Propanamide, N-[(1R)-1-(hydroxymethyl)-3-oxo-3-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]propyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

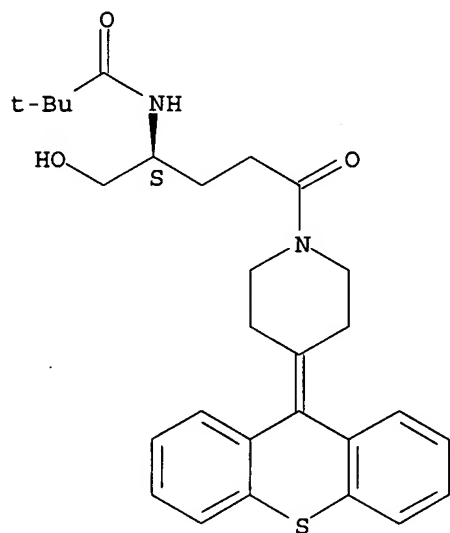
Absolute stereochemistry.



RN 500895-39-6 CAPLUS

CN Propanamide, N-[(1S)-1-(hydroxymethyl)-4-oxo-4-[4-(9H-thioxanthen-9-ylidene)-1-piperidinyl]butyl]-2,2-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 500894-98-4P 500895-61-4P 500895-62-5P

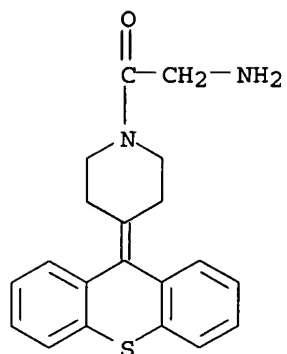
500895-63-6P 500895-64-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of diarylalkene and diarylalkane derivs. as N-type calcium channel inhibitors)

RN 500894-98-4 CAPLUS

CN Piperidine, 1-(aminoacetyl)-4-(9H-thioxanthen-9-ylidene)-, monohydrochloride (9CI) (CA INDEX NAME)

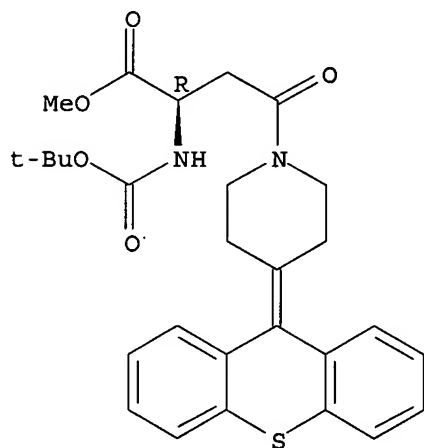


● HCl

RN 500895-61-4 CAPLUS

CN 1-Piperidinebutanoic acid, α -[[[(1,1-dimethylethoxy)carbonyl]amino]-
 γ -oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (α R)- (9CI)
 (CA INDEX NAME)

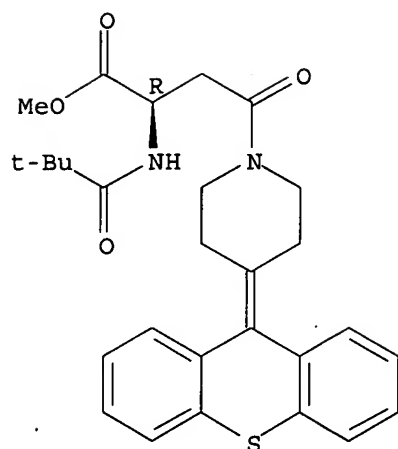
Absolute stereochemistry.



RN 500895-62-5 CAPLUS

CN 1-Piperidinebutanoic acid, α -[(2,2-dimethyl-1-oxopropyl)amino]-
 γ -oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (α R)- (9CI)
 (CA INDEX NAME)

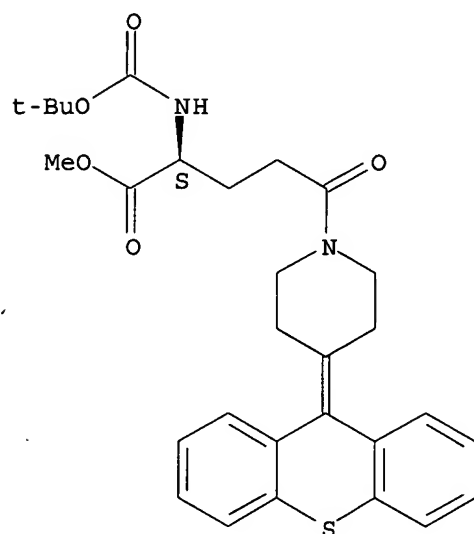
Absolute stereochemistry.



RN 500895-63-6 CAPLUS

CN 1-Piperidinepentanoic acid, α -[[1,1-dimethylethoxy)carbonyl]amino]-
 8-oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (α S)- (9CI)
 (CA INDEX NAME)

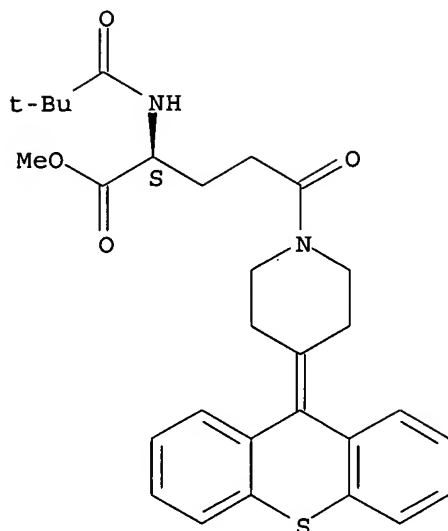
Absolute stereochemistry.



RN 500895-64-7 CAPLUS

CN 1-Piperidinepentanoic acid, α -[(2,2-dimethyl-1-oxopropyl)amino]-
 8-oxo-4-(9H-thioxanthen-9-ylidene)-, methyl ester, (α S)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



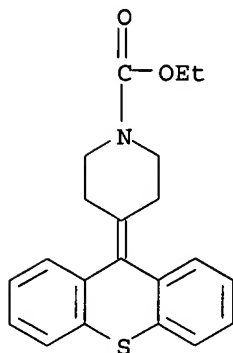
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
AN 1997:349658 CAPLUS
DN 127:75517
TI Synthesis, affinity at 5-HT_{2A}, 5-HT_{2B} and 5-HT_{2C} serotonin receptors and structure-activity relationships of a series of cyproheptadine analogs
AU Honrubia, Maria Angeles; Rodriguez, Jesus; Dominguez, Rosa; Lozoya, Estrella; Manaut, Francesc; Seijas, Julio A.; Villaverde, Maria Carmen; Calleja, Jose M.; Cadavid, Maria Isabel; et al.
CS Department of Pharmacology, Organic and Physical Chemistry, University of Santiago, Santiago de Compostela, E-15706, Spain
SO Chemical & Pharmaceutical Bulletin (1997), 45(5), 842-848
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
OS CASREACT 127:75517
AB Cyproheptadine (Cyp) is a drug that shows high affinity for type 2(5-HT₂)receptors. The authors studied a series of compds. obtained by modification of the tricyclic system of Cyp (dibenzocycloheptadiene ring) to make the thioxanthene, xanthene, dihydrodibenzocycloheptadiene, di-Ph, fluorene, and phenylmethyl analogs. Their activities at the rat cerebral cortex 5-HT_{2A} receptor were (pK_i):8.80 (Cyp), 8.60 (thioxanthene analog), 8.40 (xanthene analog), 8.05 (dihydrodibenzocycloheptadiene analog), 7.87 (di-Ph analog), 6.70 (fluorene analog) and 6.45 (phenylmethyl analog); those at the rat stomach fundus 5-HT_{2B} receptor (pA₂) were: 9.14 (Cyp), 8.49 (thioxanthene analog), 7.58 (xanthene analog), 7.02 (dihydrodibenzocycloheptadiene analog), 6.07 (di-Ph analog), and undetectable (fluorene analog, phenylmethyl analog); and those at the pig choroidal plexus 5-HT_{2C} receptor (pK_i) were: 8.71 (Cyp), 8.68 (thioxanthene analog), 8.58 (xanthene analog), 7.95 (dihydrodibenzocycloheptadiene analog), 7.57 (di-Ph analog), 6.98 (fluorene analog) and 6.63 (phenylmethyl analog). The slopes did not differ significantly from unity. The compds. exhibited the same order of activities at every type of receptor, and the most active mols. presented certain steric (butterfly conformation of the tricyclic system) and electrostatic (proton affinity on the top of the central rings) patterns. It is concluded that the activity of cyproheptadine derivs. at 5-HT₂ receptors is related to these mol. features, which make feasible a common disposition to interact with all three 5-HT₂ subtypes.
IT 138248-26-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; synthesis and affinity at 5-HT₂A and 5-HT₂B and 5-HT₂C serotonin receptors and structure-activity relationships of a series of cyproheptadine analogs)

RN 138248-26-7 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(9H-thioxanthen-9-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1995:638596 CAPLUS

DN 123:286084

TI Dibenzocycloheptenylydenepiperidine, dibenzocycloheptenylpiperazine, and heterocyclic analogs as PAF antagonists and antihistaminics

IN Wong, Jesse K.; Piwinski, John J.; Green, Michael J.

PA USA

SO U.S., 29 pp. Cont.-in-part of U.S. Ser. No. 595,329, abandoned.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | US 5416087 | A | 19950516 | US 1993-39072 | 19930407 |
| | WO 9206970 | A1 | 19920430 | WO 1991-US7170 | 19911008 |
| | W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU, US | | | | |
| | RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG | | | | |
| PRAI | US 1990-595329 | B2 | 19901010 | | |
| | WO 1991-US7170 | W | 19911008 | | |
| OS | MARPAT 123:286084 | | | | |
| GI | | | | | |

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Bis-benzo cyclohepta piperidine, piperidylydene and piperazine compds. I
[L = N or N+O-, Z = O or S, Y = [C(Ra)₂]_mX[C(Ra)₂]_n or II, m and n are integers 0, 1, 2, 3 such that m + n = 0 to 3; when m + n = 1, X = e.g., O, S(O)e where e = 0, 1, or 2; when m + n = 2, X = e.g., O, S(O)e, e = 0-2; when m + n = 3, X = a direct bond; when m + n = 0, X can be any substituent for m + n = 1 and also a direct bond, cyclopropylene,

propenylene; each Ra may be the same or different and each independently represents, e.g., H, C1-6-alkyl; the dotted line between the indicated carbon atoms 5 and 6 represents an optional double bond, such that when a double bond is present, A and B each independently represent R11, OR13, halo or OC(O)R11, and when no double bond is present between carbon atoms 5 and 6, A and B each independently represent H2; (OR13)2; (alkyl and H); (alkyl)2; [H and OC(O)R11], (H and OR11); :O or :NOR14; R1, R2, R3, R4 = e.g., H, halo, CF3; R5, R6 = e.g., H, alkyl, aryl; R7, R8, R9 = e.g., H, halo, CF3; R11 = H, alkyl, aryl; R13 = alkyl, aryl; R14 = H, alkyl; T = CH, C, or N with the dotted line attached to T representing a double bond when T is C and being absent when T is CH or N] and pharmaceutically acceptable salts thereof are disclosed, which possess anti-allergic and/or anti-inflammatory activity. Methods for preparing and using the compds. are also described. Thus, e.g., coupling of 4-(10,11-dihydro-5H-dibenzo[a,d]cyclohepten-5-ylidene)piperidine (III, preparation given) with isonicotinic acid N-oxide afforded the pyridinylcarbonyl N-oxide derivative IV which demonstrated in vitro PAF antagonism IC50 = 1.2 μ M, and in vivo inhibition of PAF-induced bronchospasm in guinea pigs of 82% at 3 mg/kg. Pharmaceutical formulations were given.

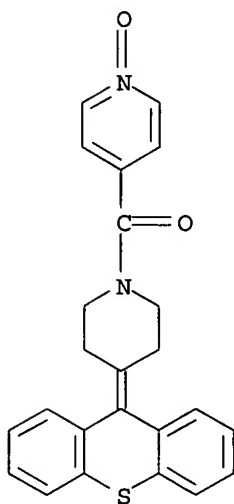
IT 142714-87-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(dibenzocycloheptenylidenepiperidine, dibenzocycloheptenylpiperazine, and heterocyclic analogs as PAF antagonists and antihistaminics)

RN 142714-87-2 CAPLUS

CN Piperidine, 1-[(1-oxido-4-pyridinyl)carbonyl]-4-(9H-thioxanthen-9-ylidene)-(9CI) (CA INDEX NAME)



L6 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1993:183395 CAPLUS

DN 118:183395

TI Novel quinolines, their preparations, and anticancer activity enhancers containing the quinolines

IN Fukazawa, Nobuyuki; Suzuki, Tsuneshi; Otsuka, Kengo; Yano, Osamu; Sato, Wakao; Tsuruo, Takashi

PA Mitsui Toatsu Chemicals, Inc., Japan; Japanese Foundation for Cancer Research

SO Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--------------|------|----------|-----------------|----------|
| PI | JP 04235983 | A | 19920825 | JP 1991-3673 | 19910117 |
| | JP 2579701 | B2 | 19970212 | | |
| PRAI | JP 1991-3673 | | 19910117 | | |

OS MARPAT 118:183395

GI For diagram(s), see printed CA Issue.

AB Anticancer activity enhancers contain quinolines I [A = C(R2)(R3)R4, Q; B = condensed benzene ring or heterocycle; R1, R2 = H, OH; R1R2 may form double bond; R3, R4 = substituted Ph, heterocycle; R5 = H, halo, lower alkyl, lower alkoxy, CF3, (substituted) amino, CN, NO2, OH, CO2H, alkoxy carbonyl; Y = (CH2)2 (when R5 ≠ O), NHCO, NHCH2, CH(OH)CH(OH), SCH2, S] or their salts, prepared by reacting (2,3-epoxypropoxy)quinoline with amines under heating and in the presence of bases.
4-[Hydroxy-bis(4-chlorophenyl)methyl]-N-methylpiperidine (4.0 g) and 4.7 g K2CO3 were suspended in 1,1,2-trichloroethane and reacted with 7.2 g 2,2,2-trichloroethyl chloroformate by refluxing for 13 h to give 4.9 g 4-[hydroxy-bis(4-chlorophenyl)methyl]-N-(2,2,2-trichloroethoxycarbonyl)piperidine. The product (2 g) was stirred with 4.0 g Zn powder in THF-1 M aqueous NH4Cl for 8 h, filtered, and the filtrate was concentrated and heated with 1.0 g 5-(2,3-epoxypropoxy)quinoline and Et3N

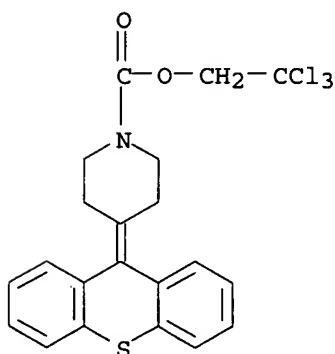
in isopropanol at 60° for 1 h to give 0.5 g 5-[3-[4-(hydroxy-bis(4-chlorophenyl)methyl)piperidin-1-yl]-2-hydroxypropoxy]quinoline (II).
Adriamycin-resistant human ovary cancer cell line 2780AD was cultured in RPMI-1640 medium containing 20 nM vincristine and bovine fetal serum in the presence of 1.0 µg/mL II at 37° for 2 h to show 445% vincristine accumulation in the cells, vs. 100%, for the control.

IT 145298-50-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and reactino of)

RN 145298-50-6 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(9H-thioxanthen-9-ylidene)-,
2,2,2-trichloroethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 7 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1992:511647 CAPLUS

DN 117:111647

TI Preparation of dibenzocycloheptylidene(pyridinylcarbonyl)piperidine
N-oxides and related compounds as platelet-activating factor (PAF)
antagonists and antihistamines

IN Wong, Jesse K.; Piwinski, John J.; Green, Michael J.

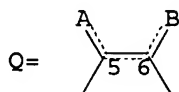
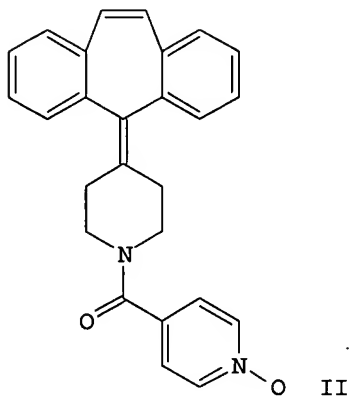
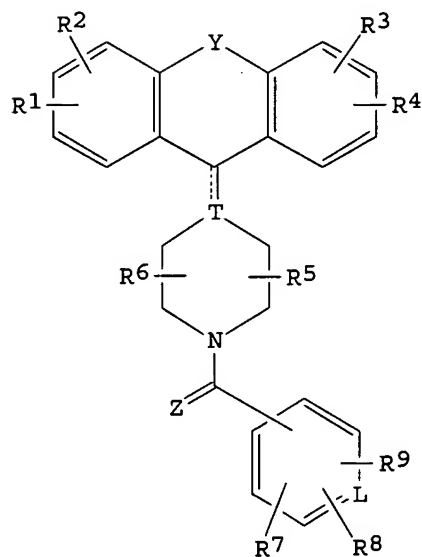
PA Schering Corp., USA

SO PCT Int. Appl., 71 pp.

CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9206970 | A1 | 19920430 | WO 1991-US7170 | 19911008 |
| | W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU, US | | | | |
| | RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, ML, MR, NL, SE, SN, TD, TG | | | | |
| | CA 2093646 | A1 | 19920411 | CA 1991-2093646 | 19911008 |
| | AU 9188540 | A | 19920520 | AU 1991-88540 | 19911008 |
| | EP 552245 | A1 | 19930728 | EP 1991-918529 | 19911008 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| | JP 05506249 | T | 19930916 | JP 1991-517936 | 19911008 |
| | US 5416087 | A | 19950516 | US 1993-39072 | 19930407 |
| PRAI | US 1990-595329 | A2 | 19901010 | | |
| | WO 1991-US7170 | A | 19911008 | | |
| OS | MARPAT 117:111647 | | | | |
| GI | | | | | |



AB The title compds. [I; L = N, N+O-; Z = O, S; Y = (CRA2)mX(CRA2)n, (un)saturated bridge Q; dotted line = optional bond; when bond present then A, B = R11, OR13, halo, etc., when bond absent then A, B = H2, (OR13)2, (alkyl and H), (alkyl)2, etc.; m, n = 0-3, m+n = 0-3; X = O, SO0-2, NR14, CONR14, NR14CO, CSNR14, NR14CS, CO2, O2C, bond, cyclopropylene, propylene, depending on the value of m+n; R14 = H, alkyl; Ra = H, C1-6 alkyl; R1-R4 = H, halo CF3, OR11, NO2, cyano, aryl, (un)substituted alkyl, -alkenyl, etc.; R1R2 = benzo; R3R4 = benzo; R5, R6 = H, aryl, (un)substituted alkyl; R5R6 = O, S; R7-R9 = H, halo, CF3, COR11, SR11, NO2, aryl, etc.; R11 = H, alkyl, aryl; R13 = alkyl, aryl; T = CH, C, N; dotted line attached to T = optional double bond] or their pharmaceutically acceptable salts or solvates, useful as antiallergics and antiinflammatories, were prepared A

solution of 412 mg 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide HCl in 5 mL CH₂Cl₂ was added dropwise to a mixture of 422 mg 4-(5H-dibenzo[a,d]cyclohept-5-ylidene)piperidine, 234 mg isonicotinic acid N-oxide, and 274 mg 1-hydroxybenzotriazole hydrate in 5 mL CH₂Cl₂ at -15° under N and the whole allowed to warm to the ambient temp and stirred overnight to give 445 mg title compound II. The latter antagonized PAF-induced human blood platelet aggregation with IC₅₀ = 2 μM, vs. 0.61 μM for the known PAF antagonist 8-chloro-6,11-dihydro-11-(1-acetyl-4-piperidylidene)-5H-benzo[5,6]cyclohepta[1,2-b]pyridine as a pos. control.

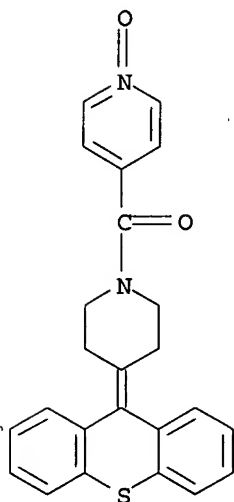
IT 142714-87-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as platelet-activating factor antagonist and antihistamine)

RN 142714-87-2 CAPLUS

CN Piperidine, 1-[(1-oxido-4-pyridinyl)carbonyl]-4-(9H-thioxanthen-9-ylidene)-(9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1992:83546 CAPLUS

DN 116:83546

TI Preparation of ω-[4-[(hetero)arylidene]piperidino]alkanoates as antiallergic and antihistaminic agents

IN Ito, Yasuo; Kato, Hideo; Koshinaka, Eiichi; Ogawa, Nobuo; Nishino, Hiroyuki; Sakaguchi, Jun

PA Hokuriku Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 28 pp.

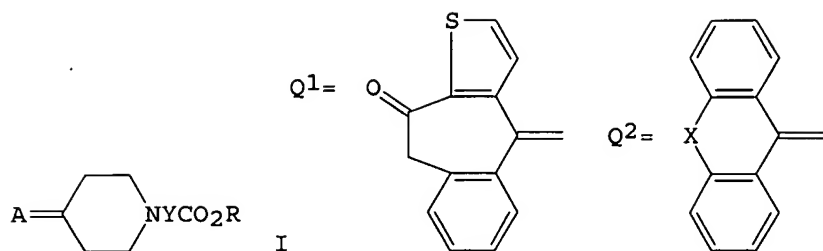
CODEN: EPXXDW

DT Patent

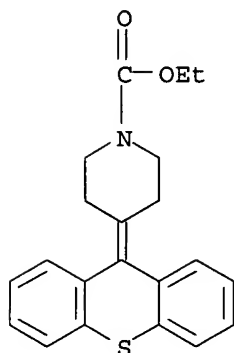
LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 451772 | A1 | 19911016 | EP 1991-105567 | 19910409 |
| | R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE | | | | |
| | JP 03294277 | A | 19911225 | JP 1990-93968 | 19900411 |
| | JP 04001193 | A | 19920106 | JP 1990-97522 | 19900416 |
| | CA 2038417 | A1 | 19911012 | CA 1991-2038417 | 19910315 |
| PRAI | JP 1990-93968 | A | 19900411 | | |
| | JP 1990-97522 | A | 19900416 | | |
| OS | MARPAT 116:83546 | | | | |
| GI | | | | | |

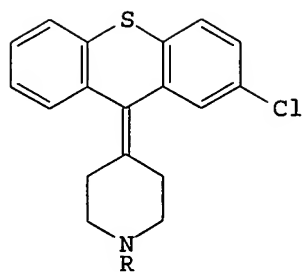


AB Title compds. [I; A = (hetero)arylidene groups Q1, Q2; R = H, alkyl; X = CH₂S, S; Y = alkylene] were prepared Thus, 4-(9H-thioxanthen-9-cyclidene)piperidine (preparation given) was condensed with Br(CH₂)₃CO₂Et to give, after saponification, I (A = Q2, R = H, X = S) [II; Y = (CH₂)₃]. II (Y = CH₂CH₂) gave 96% inhibition of passive cutaneous anaphylaxis in rats at 1 mg/kg orally.
 IT 138248-26-7P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reaction of, in preparation of antiallergics and antihistaminics)
 RN 138248-26-7 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-(9H-thioxanthen-9-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 9 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1987:213764 CAPLUS
 DN 106:213764
 TI Preparation of thioxanthene amino alcohol and its oxalate salt
 IN Protiva, Miroslav; Kmonicek, Vojtech
 PA Czech.
 SO Czech., 3 pp.
 CODEN: CZXXA9
 DT Patent
 LA Czech
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---------------------|------|----------|-----------------|----------|
| PI | CS 235148 | B1 | 19850515 | CS 1984-766 | 19840202 |
| PRAI | CS 1984-766 | | 19840202 | | |
| OS | CASREACT 106:213764 | | | | |
| GI | | | | | |



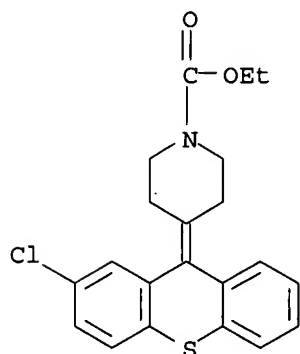
- I, R=Me
 II, R=CO₂Et
 III, R=H
 IV, R=CH₂CH₂OH

AB Thioxanthene I was demethylated with ClCO₂Et in boiling C₆H₆, the resulting crude II (79%) was refluxed at 130° in alc. KOH, and 69% oily III was extracted with C₆H₆. Boiling III with BrCH₂CH₂OH in Me₂CO containing K₂CO₃ gave 79% title compound IV which was converted to crystalline H oxalate salt. Both compds. had tranquilizing activity without cataleptic or extrapyramidal symptom side effects.

IT 94923-45-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and deacylation of)

RN 94923-45-2 CAPLUS

CN 1-Piperidinecarboxylic acid, 4-(2-chloro-9H-thioxanthen-9-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



L6 ANSWER 10 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN

AN 1986:420530 CAPLUS

DN 105:20530

TI Thioxanthenes used as pesticides

IN Traber, Walter; Fischer, Hanspeter

PA Ciba-Geigy A.-G. , Switz.

SO Eur. Pat. Appl., 33 pp.
 CODEN: EPXXDW

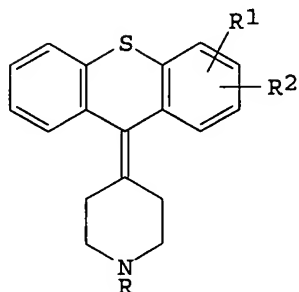
DT Patent

LA German

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|-----------------------------------|------|----------|-----------------|----------|
| PI | EP 179020 | A2 | 19860423 | EP 1985-810466 | 19851014 |
| | EP 179020 | A3 | 19870325 | | |
| | R: BE, CH, DE, FR, GB, IT, LI, NL | | | | |
| | US 4777177 | A | 19881011 | US 1985-786380 | 19851010 |
| | BR 8505222 | A | 19860729 | BR 1985-5222 | 19851018 |
| | JP 61106573 | A | 19860524 | JP 1985-234387 | 19851019 |

PRAI CH 1984-5010 A 19841019
 CH 1984-5011 A 19841019
 CH 1985-3830 A 19850905
 OS MARPAT 105:20530
 GI



I

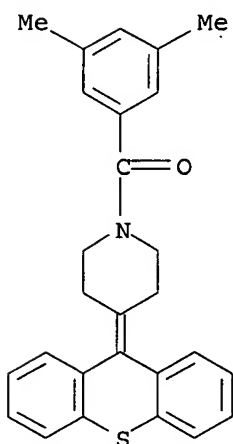
AB The thioxanthenylidenepiperidines I (R = H, alkyl, alkenyl, alkynyl, CN, etc.; R1,R2 = H, halo, alkyl, etc.) are prepared as acaricides, insecticides, and fungicides. Thus, 4-(2-chlorothioxanthen-9-ylidene)piperidine was refluxed with NaH in THF for 22 h, followed by the addition of EtI and refluxing for 24 h to give I (R = Et, R1 = 2-Cl, R2 = H) (II). *Lucilia sericata* Reared on a medium containing 0.1% II showed 80-100% mortality.

IT 102905-77-1P 102905-82-8P 102905-83-9P
 102905-84-0P 102905-85-1P 102905-86-2P
 102905-87-3P 102905-88-4P 102905-89-5P
 102905-90-8P 102905-95-3P 102905-96-4P
 102905-97-5P 102925-95-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of, as pesticides)

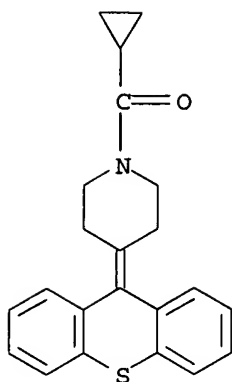
RN 102905-77-1 CAPLUS

CN Piperidine, 1-(3,5-dimethylbenzoyl)-4-(9H-thioxanthen-9-ylidene)- (9CI)
 (CA INDEX NAME)

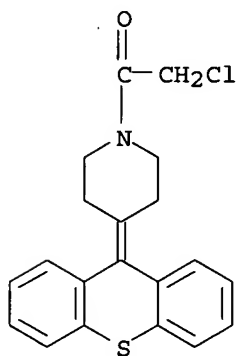


RN 102905-82-8 CAPLUS

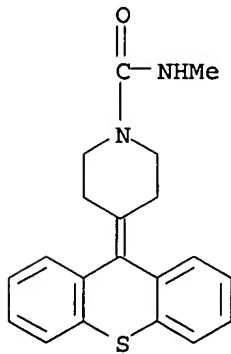
CN Piperidine, 1-(cyclopropylcarbonyl)-4-(9H-thioxanthen-9-ylidene)- (9CI)
 (CA INDEX NAME)



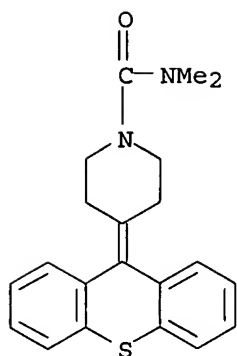
RN 102905-83-9 CAPLUS
 CN Piperidine, 1-(chloroacetyl)-4-(9H-thioxanthen-9-ylidene)- (9CI) (CA
 INDEX NAME)



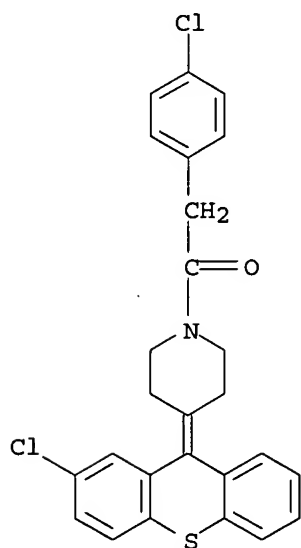
RN 102905-84-0 CAPLUS
 CN 1-Piperidinecarboxamide, N-methyl-4-(9H-thioxanthen-9-ylidene)- (9CI) (CA
 INDEX NAME)



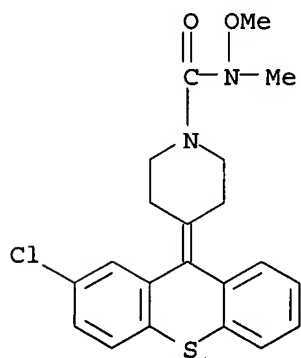
RN 102905-85-1 CAPLUS
 CN 1-Piperidinecarboxamide, N,N-dimethyl-4-(9H-thioxanthen-9-ylidene)- (9CI)
 (CA INDEX NAME)



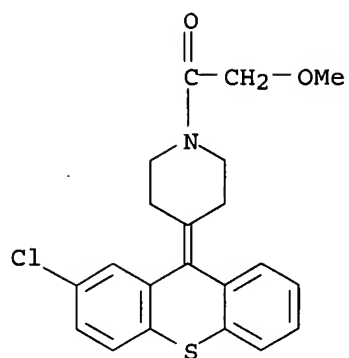
RN 102905-86-2 CAPLUS
 CN Piperidine, 1-[(4-chlorophenyl)acetyl]-4-(2-chloro-9H-thioxanthen-9-ylidene)- (9CI) (CA INDEX NAME)



RN 102905-87-3 CAPLUS
 CN 1-Piperidinecarboxamide, 4-(2-chloro-9H-thioxanthen-9-ylidene)-N-methoxy-N-methyl- (9CI) (CA INDEX NAME)

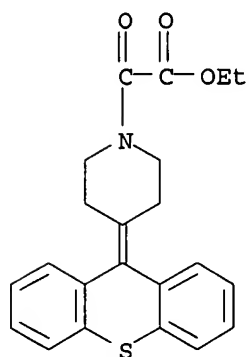


RN 102905-88-4 CAPLUS
 CN Piperidine, 4-(2-chloro-9H-thioxanthen-9-ylidene)-1-(methoxyacetyl)- (9CI) (CA INDEX NAME)



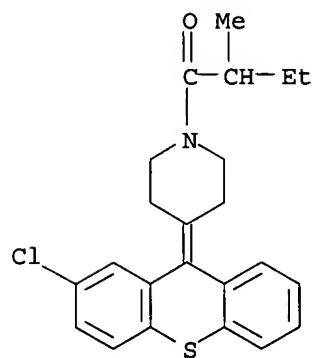
RN 102905-89-5 CAPLUS

CN 1-Piperidineacetic acid, α -oxo-4-(9H-thioxanthen-9-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)



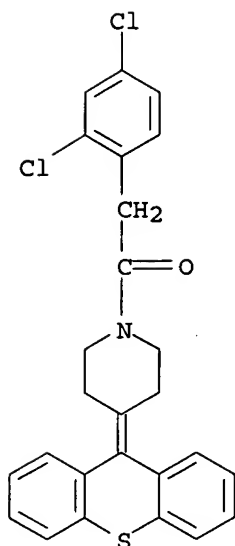
RN 102905-90-8 CAPLUS

CN Piperidine, 4-(2-chloro-9H-thioxanthen-9-ylidene)-1-(2-methyl-1-oxobutyl)-(9CI) (CA INDEX NAME)

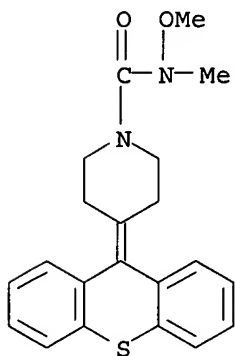


RN 102905-95-3 CAPLUS

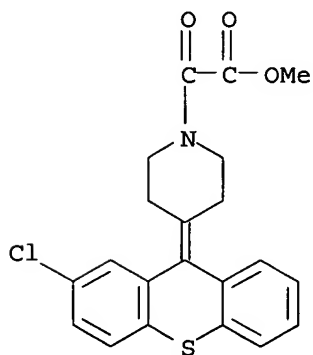
CN Piperidine, 1-[(2,4-dichlorophenyl)acetyl]-4-(9H-thioxanthen-9-ylidene)-(9CI) (CA INDEX NAME)



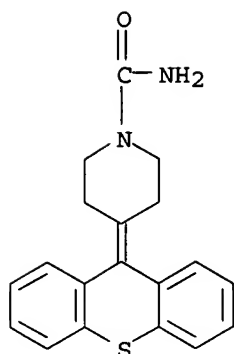
RN 102905-96-4 CAPLUS
 CN 1-Piperidinecarboxamide, N-methoxy-N-methyl-4-(9H-thioxanthen-9-ylidene)-
 (9CI) (CA INDEX NAME)



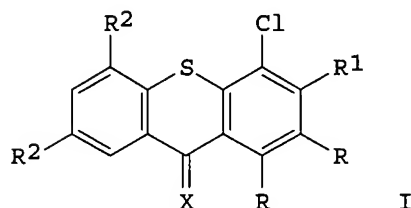
RN 102905-97-5 CAPLUS
 CN 1-Piperidineacetic acid, 4-(2-chloro-9H-thioxanthen-9-ylidene)- α -oxo-
 , methyl ester (9CI) (CA INDEX NAME)



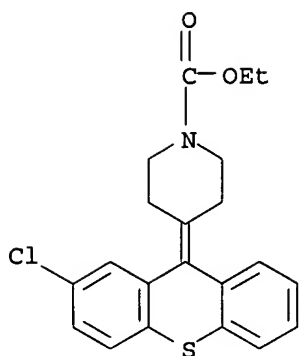
RN 102925-95-1 CAPLUS
 CN 1-Piperidinecarboxamide, 4-(9H-thioxanthen-9-ylidene)- (9CI) (CA INDEX
 NAME)



L6 ANSWER 11 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1985:149047 CAPLUS
 DN 102:149047
 TI Thioxanthene derivatives of pharmacological interest: 1,2,4-trichloro and 2,4,5,6-tetrachloro derivatives of 9-[3-(dimethylamino)propylidene]thioxanthene
 AU Bartl, Vaclav; Kmonicek, Vojtech; Sedivy, Zdenek; Svatek, Emil; Protiva, Jiri; Protiva, Miroslav
 CS Res. Inst. Pharm. Biochem., Prague, 130 60/3, Czech.
 SO Collection of Czechoslovak Chemical Communications (1984), 49(10), 2295-308
 CODEN: CCCCAK; ISSN: 0366-547X
 DT Journal
 LA English
 OS CASREACT 102:149047
 GI

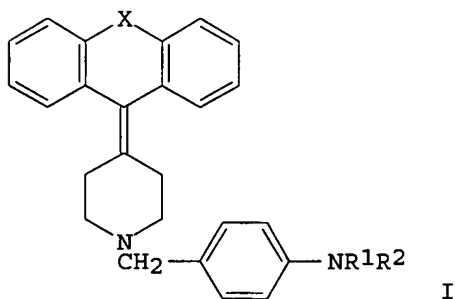


AB 2,3-Cl₂C₆H₃SH and 2,4,5-Cl₃C₆H₂SH underwent substitution reactions with 2,3,5-ICl₂C₆H₂CO₂H and 2-IC₆H₄CO₂H, resp., and the resulting acids were cyclized to give thioxanthenes I (X = O, R = H, R₁ = R₂ = Cl, R = Cl, R₁ = R₂ = H). Grignard reaction of these ketones with Me₂N(CH₂)₃Cl afforded amino alcs. which were transformed by acid catalyzed dehydration to the title compds. I [X = Me₂NCH₂CH₂CH₂, R = H, R₁ = R₂ = Cl (II), R = Cl, R₁ = R₂ = H (III)]. 2-Chloro-9-[1-(2-hydroxyethyl)-4-piperidinyldene]thioxanthone (IV) was obtained by a modified synthesis. II is inactive in CNS effects but has high inhibitory activity toward gram-pos. microorganisms. IV is a mild tranquilizer.
 IT 94923-45-2P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and alkaline hydrolysis of)
 RN 94923-45-2 CAPLUS
 CN 1-Piperidinecarboxylic acid, 4-(2-chloro-9H-thioxanthen-9-ylidene)-, ethyl ester (9CI) (CA INDEX NAME)

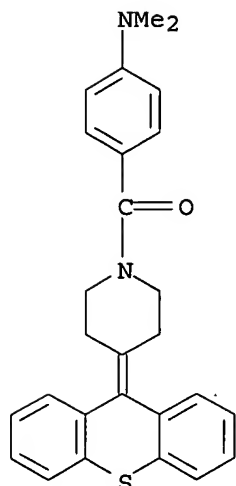


L6 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1983:53709 CAPLUS
 DN 98:53709
 TI Antiallergic or antihypertensive 1-piperidinylmethylbenzenamines
 IN Deason, James R.; Partis, Richard A.
 PA G.D. Searle and Co., USA
 SO U.S., 5 pp. Cont. of U.S. Ser. No. 156,248, abandoned.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|------------------------------------|------|----------|-----------------|----------|
| PI | US 4356184 | A | 19821026 | US 1981-247568 | 19810325 |
| PRAI | US 1980-156248 | A2 | 19800604 | | |
| OS | CASREACT 98:53709; MARPAT 98:53709 | | | | |
| GI | | | | | |

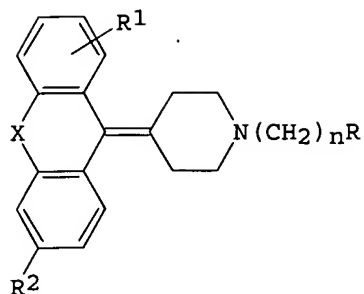


AB The title compds. I (R1, R2 = H, alkyl; X = S, CH2CH2) were prepared Thus, p-Me2NC6H4COCl was treated with 4-(9-thioxanthylidene)piperidine followed by reduction of the resulting methanone to give I (R1 = R2 = Me; X = S (II)). II had antiallergic activity at 0.2-50 mg/kg and was antihypertensive at 12.5-15 mg/kg.
 IT 84333-78-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reduction of)
 RN 84333-78-8 CAPLUS
 CN Piperidine, 1-[4-(dimethylamino)benzoyl]-4-(9H-thioxanthen-9-ylidene)-(9CI) (CA INDEX NAME)

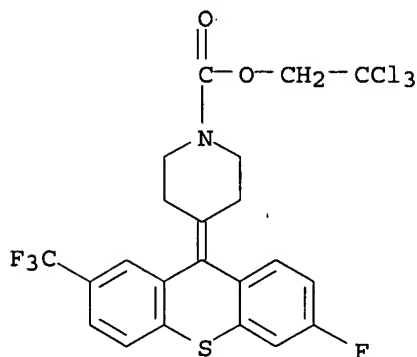


L6 ANSWER 13 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1980:408028 CAPLUS
 DN 93:8028
 TI Xanthone and thioxanthone derivatives and compositions containing them
 IN Lassen, Niels; Bogeso, Klaus Peter; Hansen, Peter Bregnedal; Buus, Jorn
 Lasse Martin; Bigler, Allan Johan
 PA Kefalas A/S, Den.
 SO Eur. Pat. Appl., 51 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | EP 5607 | A1 | 19791128 | EP 1979-300778 | 19790504 |
| | EP 5607 | B1 | 19831026 | | |
| | R: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE | | | | |
| | US 4285956 | A | 19810825 | US 1979-35735 | 19790503 |
| | AT 5141 | T | 19831115 | AT 1979-300778 | 19790504 |
| | DK 7901901 | A | 19791113 | DK 1979-1901 | 19790509 |
| | ZA 7902250 | A | 19800827 | ZA 1979-2250 | 19790509 |
| | FI 7901503 | A | 19791113 | FI 1979-1503 | 19790510 |
| | AU 7946941 | A | 19791115 | AU 1979-46941 | 19790510 |
| | AU 522926 | B2 | 19820701 | | |
| | NO 7901592 | A | 19791113 | NO 1979-1592 | 19790511 |
| | NO 150837 | B | 19840917 | | |
| | NO 150837 | C | 19850109 | | |
| | ES 480468 | A1 | 19800701 | ES 1979-480468 | 19790511 |
| | CA 1127648 | A1 | 19820713 | CA 1979-327464 | 19790511 |
| | JP 54154772 | A | 19791206 | JP 1979-57640 | 19790512 |
| | US 4275209 | A | 19810623 | US 1979-106353 | 19791221 |
| | US 4309429 | A | 19820105 | US 1979-105985 | 19791221 |
| PRAI | GB 1978-19310 | | 19780512 | | |
| | US 1979-35735 | A3 | 19790503 | | |
| | EP 1979-300778 | A | 19790504 | | |
| OS | MARPAT 93:8028 | | | | |
| GI | | | | | |

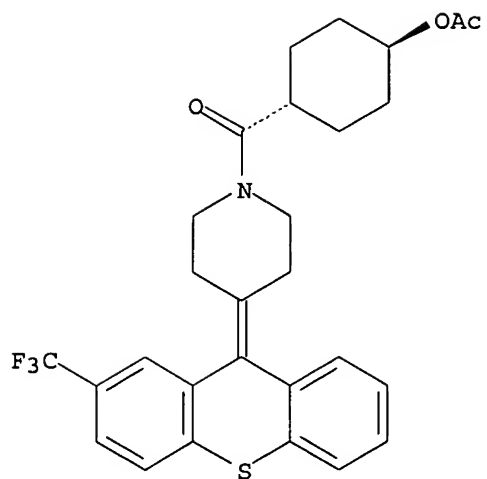


- AB The neuroleptic compds. I (X = O, S; R = substituted cycloalkyl, optionally substituted heterocycle, containing O and/or N; R1 = halogen, alkyl, alkoxy, SMe, SO2Me, SO2NMe2, CF3, Ac; R2 = H, F, Me; n = 0-3) were prepared Thus Grignard reaction of 2-trifluoromethyl-6-fluoro-9-thioxanthone with 4-chloro-1-methylpiperidine and dehydration of the alc. gave I (R = H, R1 = 2-CF3, R2 = F, X = S, n = 1), which was treated with ClCO2CH2CCl3 and decarboxylated to give I (X = S, R = H, R1 = 2-CF3, R2 = F, n = 0). This was acylated with trans-4-acetoxycyclohexanecarbonyl chloride, followed by LiAlH4 reduction to give I (X = S, R = trans-4-hydroxycyclohexyl, R1 = 2-CF3, R2 = F, n = 1; II). II had an amphetamine antagonist ED50 of 0.32 mg/kg i.p. in rats.
- IT 73846-53-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and decarboxylation of)
- RN 73846-53-4 CAPLUS
- CN 1-Piperidinecarboxylic acid, 4-[6-fluoro-2-(trifluoromethyl)-9H-thioxanthen-9-ylidene]-, 2,2,2-trichloroethyl ester (9CI) (CA INDEX NAME)



- IT 73846-68-1P 73847-14-0P 73847-20-8P
 73847-29-7P 73847-30-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)
- RN 73846-68-1 CAPLUS
- CN Piperidine, 1-[[4-(acetyloxy)cyclohexyl]carbonyl]-4-[2-(trifluoromethyl)-9H-thioxanthen-9-ylidene]-, trans- (9CI) (CA INDEX NAME)

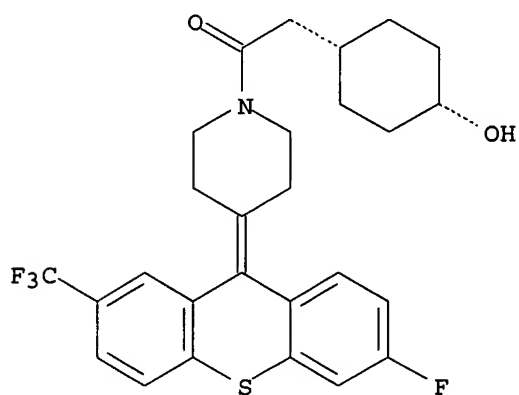
Relative stereochemistry.



RN 73847-14-0 CAPLUS

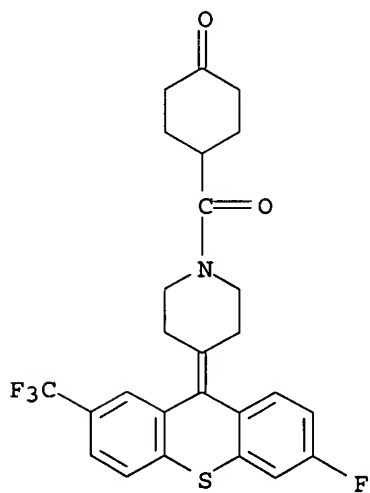
CN Piperidine, 4-[6-fluoro-2-(trifluoromethyl)-9H-thioxanthen-9-ylidene]-1-[(4-hydroxycyclohexyl)acetyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



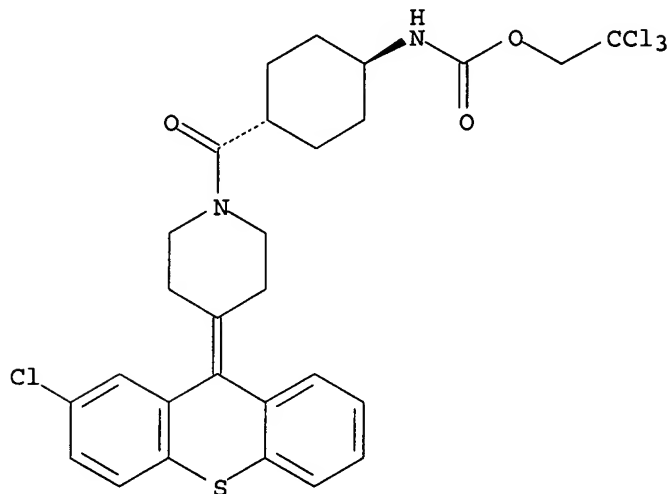
RN 73847-20-8 CAPLUS

CN Piperidine, 4-[6-fluoro-2-(trifluoromethyl)-9H-thioxanthen-9-ylidene]-1-[(4-oxocyclohexyl)carbonyl]- (9CI) (CA INDEX NAME)



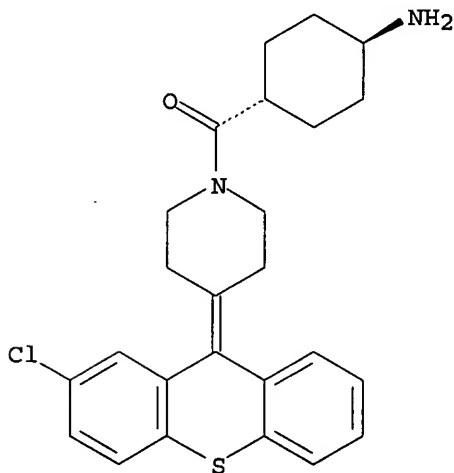
RN 73847-29-7 CAPLUS
 CN Carbamic acid, [4-[[4-(2-chloro-9H-thioxanthen-9-ylidene)-1-piperidinyl]carbonyl]cyclohexyl]-, 2,2,2-trichloroethyl ester, trans-(9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 73847-30-0 CAPLUS
 CN Piperidine, 1-[(4-aminocyclohexyl)carbonyl]-4-(2-chloro-9H-thioxanthen-9-ylidene)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



L6 ANSWER 14 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1977:121184 CAPLUS
 DN 86:121184
 TI Piperidylidene derivatives
 PA Smithkline Corp., USA
 SO Fr. Demande, 35 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN.CNT 2

PATENT NO.

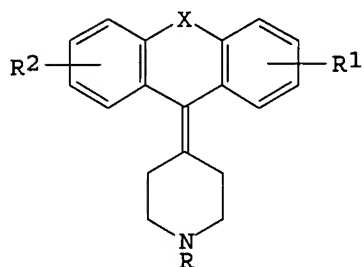
KIND

DATE

APPLICATION NO.

DATE

| | | | | | |
|------|------------------|----|----------|----------------|----------|
| PI | FR 2290202 | A1 | 19760604 | FR 1975-33631 | 19751104 |
| | FR 2290202 | B1 | 19800523 | | |
| | ZA 7506550 | A | 19760929 | ZA 1975-6550 | 19751016 |
| | AU 7586247 | A | 19770505 | AU 1975-86247 | 19751031 |
| | AU 498298 | B2 | 19790301 | | |
| | CA 1055945 | A1 | 19790605 | CA 1975-238781 | 19751031 |
| | IL 48400 | A | 19790131 | IL 1975-48400 | 19751102 |
| | HU 174639 | B | 19800228 | HU 1975-SI1494 | 19751103 |
| | BE 835224 | A1 | 19760504 | BE 1975-161500 | 19751104 |
| | DK 7504957 | A | 19760507 | DK 1975-4957 | 19751104 |
| | DK 139429 | B | 19790219 | | |
| | DK 139429 | C | 19790806 | | |
| | NL 7512974 | A | 19760510 | NL 1975-12974 | 19751105 |
| | JP 51070768 | A | 19760618 | JP 1975-133564 | 19751105 |
| | JP 58026754 | B | 19830604 | | |
| | ES 442357 | A1 | 19770401 | ES 1975-442357 | 19751105 |
| | CH 624403 | A5 | 19810731 | CH 1975-14321 | 19751105 |
| | JP 62020190 | B | 19870506 | JP 1976-1409 | 19760101 |
| PRAI | US 1974-521216 | A | 19741106 | | |
| OS | MARPAT 86:121184 | | | | |
| GI | | | | | |



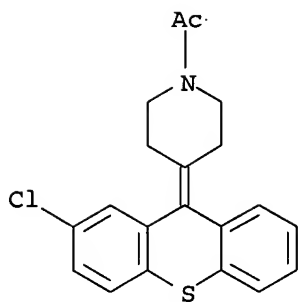
I

AB Piperidylidene derivs. I (R = H, Me, CH₂CH₂OH, Et, Bu, cyclobutylmethyl, Pr, (CH₂)₃OH; R₁ = 2-Cl, 2-CF₃, 2-SMe, 2-F, 2-Br, 2-CN, 3-F, 3-Cl; R₂ = H, 6-Cl, 6-F; X = O, S; R = Me, R₁ = H, 3-Cl, R₂ = H, 9-Cl, X = OCH₂) were prepared for use as tranquilizers without extrapyramidal side-effects. Grignard reaction of 4-chloro-1-methylpiperidine with 2-chloroxanthone and dehydration of the resulting alc. gave I (R = Me, R₁ = 2-Cl, R₂ = H, X = O).

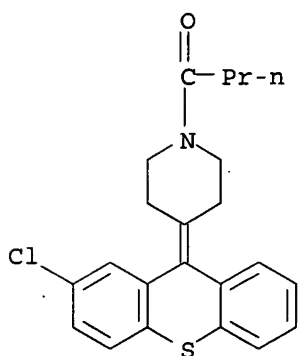
IT 60086-30-8P 60086-31-9P 60132-03-8P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and reduction of)

RN 60086-30-8 CAPLUS

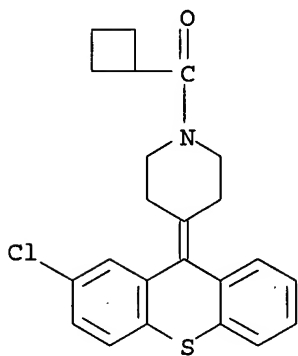
CN Piperidine, 1-acetyl-4-(2-chloro-9H-thioxanthen-9-ylidene)- (9CI) (CA INDEX NAME)



RN 60086-31-9 CAPLUS
 CN Piperidine, 4-(2-chloro-9H-thioxanthen-9-ylidene)-1-(1-oxobutyl)- (9CI)
 (CA INDEX NAME)



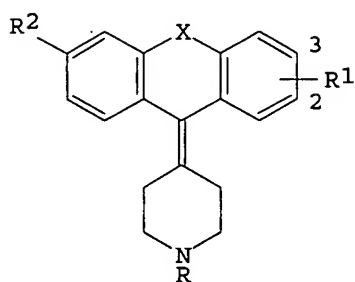
RN 60132-03-8 CAPLUS
 CN Piperidine, 4-(2-chloro-9H-thioxanthen-9-ylidene)-1-(cyclobutylcarbonyl)-
 (9CI) (CA INDEX NAME)



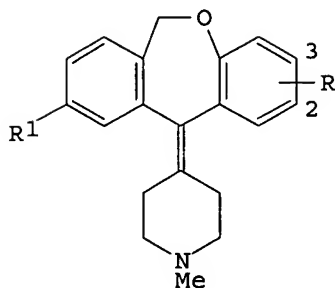
L6 ANSWER 15 OF 15 CAPLUS COPYRIGHT 2006 ACS on STN
 AN 1976:478025 CAPLUS
 DN 85:78025
 TI Piperidylidene derivatives and their salts
 IN Zirkle, Charles L.
 PA Smithkline Corp., USA
 SO Ger. Offen., 46 pp.
 CODEN: GWXXBX
 DT Patent
 LA German

FAN. CNT 2

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|----------------|------|----------|-----------------|----------|
| PI | DE 2549841 | A1 | 19760513 | DE 1975-2549841 | 19751106 |
| | DE 2549841 | C2 | 19880707 | | |
| | ZA 7506550 | A | 19760929 | ZA 1975-6550 | 19751016 |
| | AU 7586247 | A | 19770505 | AU 1975-86247 | 19751031 |
| | AU 498298 | B2 | 19790301 | | |
| | CA 1055945 | A1 | 19790605 | CA 1975-238781 | 19751031 |
| | IL 48400 | A | 19790131 | IL 1975-48400 | 19751102 |
| | HU 174639 | B | 19800228 | HU 1975-SI1494 | 19751103 |
| | BE 835224 | A1 | 19760504 | BE 1975-161500 | 19751104 |
| | DK 7504957 | A | 19760507 | DK 1975-4957 | 19751104 |
| | DK 139429 | B | 19790219 | | |
| | DK 139429 | C | 19790806 | | |
| | NL 7512974 | A | 19760510 | NL 1975-12974 | 19751105 |
| | JP 51070768 | A | 19760618 | JP 1975-133564 | 19751105 |
| | JP 58026754 | B | 19830604 | | |
| | ES 442357 | A1 | 19770401 | ES 1975-442357 | 19751105 |
| | CH 624403 | A5 | 19810731 | CH 1975-14321 | 19751105 |
| | JP 62020190 | B | 19870506 | JP 1976-1409 | 19760101 |
| PRAI | US 1974-521216 | A | 19741106 | | |
| GI | | | | | |



I



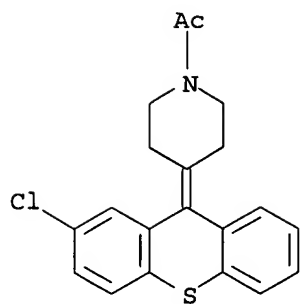
II

AB Piperidylidene derivs. I [R = H, Me, Et, Pr, Bu, CH₂CH₂OH, (CH₂)₃OH, cyclobutylmethyl; R₁ = 2-Cl, 3-Cl, 2-MeS 2-F, 2-Br, 2-CF₃, 2-cyano; R₂ = H, Cl, F; X = O, S] and(or) their HCl, maleic acid, MeSO₃H, or furmatic acid salts (29 compds.) and II (R = H, R₁ = Cl and HCl salt; R = 3-Cl, R₁ = H), useful as tranquilizers, were prepared by 6 methods. Thus, e.g., Grignard reaction of 4-chloro-1-methylpiperidine with 2-chloroxanthone gave 2-chloro-9-(1-methyl-4-piperidyl)xanthen-9-ol, which was dehydrated with o-HO₃SC₆H₄CO₂H anhydride in EtCO₂H to give I (R = Me, R₁ = 2-Cl, R₂ = H, X = O), isolated as the maleateeee. Treatment of I (R = Me) with BrCN gave I (R = cyano) which were hydrolyzed to I (R = H). These were alkylated or acrylated with subsequent reduction Tables showing the antipsychotic and extrapyramidal activity of I and II were given.

IT 60086-30-8 60086-31-9 60132-03-8
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (reduction of)

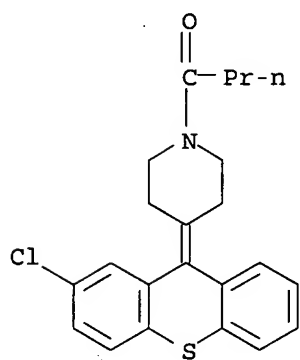
RN 60086-30-8 CAPLUS

CN Piperidine, 1-acetyl-4-(2-chloro-9H-thioxanthen-9-ylidene)- (9CI) (CA INDEX NAME)



RN 60086-31-9 CAPLUS

CN Piperidine, 4-(2-chloro-9H-thioxanthen-9-ylidene)-1-(1-oxobutyl)- (9CI)
(CA INDEX NAME)



RN 60132-03-8 CAPLUS

CN Piperidine, 4-(2-chloro-9H-thioxanthen-9-ylidene)-1-(cyclobutylcarbonyl)- (9CI) (CA INDEX NAME)

